

GENie EC Calibration Gas System



The GENie-EC is a portable, hand-held, accurate gas calibration instrument for calibrating chlorine, chlorine dioxide, hydrogen, hydrogen sulphide, or hydrogen cyanide gas sensors. It uses a sealed gas generating cell that when placed in the device, emits a small quantity of gas that is user adjustable allowing for the calibration of gases types listed.

The instrument requires a base unit (which provides a micro-processor based user interface and control system), a gas generating module and a gas source. The LCD display is capable of showing the menu structure in English, French, German and Spanish. It is powered by 4 heavy duty AA alkaline batteries that provide approximately 10 hours of continuous operation (at 0.5 LPM). It comes with a generating gas cell that offers 50 or 100 hours of source gas use. The gas cells are non-hazardous to transport and can be disposed of when empty. The delivery hose comes standard with the unit offering a 1.5 m long x 4.76 mm OD (5 ft long x 3/16 in OD) Teflon lined hose for delivering the gas to the sensor or calibration adaptor. It also comes with a nylon carrying case for convenience and protection. The front of the carrying case is clear plastic, allowing the unit to be operated while within the case.

The GENie-EC should be sent back to the factory after 100 hours or annually calibration to ensure proper operation of the device including the flow meter and to replace the internal charcoal filter to promote optimum performance.

KEY FEATURES

- » Hand held, rugged design
- » Up to 100 hours of gas source use
- » User adjustable gas concentration outputs
- » Disposable gas generating cells do not expire and are non-hazardous for transport
- » Simple to use
- » Traceable to NIST standards

TECHNICAL SPECIFICATIONS

GAS TYPE

Chlorine (Cl₂), Chlorine dioxide (ClO₂), Hydrogen sulphide (H₂S), Hydrogen cyanide (HCN), Hydrogen (H₂)

Source Life 50 or 100 hours

Accuracy ±10%

Repeatability ±5%

MECHANICAL

Weight 907 g (2 lb)

Size 127 mm W x 98.55 mm H x 79.5 mm D
(5.0" W x 3.88" H x 3.13" D)

TECHNICAL SPECIFICATIONS continued

Tubing (supplied)	1.5 m long x 4.76 mm OD (5 ft long x 3/16 in OD) Teflon lined hose
Flow Rate	Range 0.2 to 1.0 LPM
Lifespan	500 hours of operation (should be factory calibrated every 100 hours or annually)

ELECTRICAL

Power Source	4 alkaline AA batteries
Battery Life	approximately 10 hours
Warm-up Time	approximately 2 minutes

USER INTERFACE

Display	LCD display
Push Buttons	SELECT and POWER push button type switches
Menu Languages	English, French, German, Spanish

ENVIRONMENTAL

Operating Temperature	0°C to 50°C (32°F to 122°F)
Humidity	0 - 100% RH (intermittent use)

CERTIFICATIONS

Conforms to: EC Directive 89/336/EEC in accordance with the provisions of Statutory Instrument 2372
Conforms to: EN 50081-1 and EN 50082-1

PRODUCT CODES

GENIE-BASE	Base Unit for all GENIE Calibration Systems (required)
GENIE-EC	Electrochemical module, includes a 1.5 m long x 4.76 mm OD (5 ft x 3/16 in OD) Teflon lined hose, nylon carrying case, magnetic screwdriver, batteries and manual. <i>Source gas not included (order from list below). Does not include Base Unit.</i>
510-0200-00	Chlorine (Cl ₂) 0.5 - 50 ppm, 50 hrs
510-0200-05	Chlorine (Cl ₂) 0.05 - 5 ppm, 50 hrs
510-0206-00	Chlorine dioxide (ClO ₂) 0.5 - 5 ppm, 50 hrs
510-0209-00	Hydrogen (H ₂) 0.5 - 50 ppm, 50 hrs
510-0205-00	Hydrogen sulphide (H ₂ S) 0.5 - 50 ppm, 50 hrs
510-0205-05	Hydrogen sulphide (H ₂ S) 0.05 - 5 ppm, 50 hrs
510-0207-00	Hydrogen cyanide (HCN) 0.5 - 50 ppm, 50 hrs
510-0207-05	Hydrogen cyanide (HCN) 0.05 - 5 ppm, 50 hrs
510-0200-20	Chlorine (Cl ₂) 0.5 - 50 ppm, 100 hrs
510-0200-25	Chlorine (Cl ₂) 0.05 - 5 ppm, 100 hrs
510-0206-05	Chlorine dioxide (ClO ₂) 0.5 - 5 ppm, 100 hrs
510-0209-20	Hydrogen (H ₂) 0.5 - 50 ppm, 100 hrs
510-0201-09	Hydrogen (H ₂) 0.5 - 50 ppm, 100 hrs
510-0205-20	Hydrogen sulphide (H ₂ S) 0.5 - 50 ppm, 100 hrs
510-0205-25	Hydrogen sulphide (H ₂ S) 0.05 - 5 ppm, 100 hrs
510-0207-20	Hydrogen cyanide (HCN) 0.5 - 50 ppm, 100 hrs
510-0207-25	Hydrogen cyanide (HCN) 0.05 - 5 ppm, 100 hrs